

TOOTHBRUSH (JP7116028A2)

The screenshot shows the Delphion website interface. At the top, there's a navigation bar with links for "ABOUT DELPHION", "PRODUCTS", "NEWS & EVENTS", "MY ACCOUNT", and "IP SL". Below the navigation bar, there are links for "Log In", "Order Form", "Work Files", "View Cart", "Research", "Licensing", and "Patent Office Solutions". The main content area displays the patent information for JP7116028A2: TOOTHBRUSH.

**The Delphion  
Integrated  
View**

**Other Views:**

[INPADOC](#)

Title: **JP7116028A2: TOOTHBRUSH**

Country: **JP Japan**

Kind: **A**

Inventor(s): **MUELLER INGO  
SCHNEIDER NORBERT  
KRAMMER ERICH**

Applicant/Assignee:



**PHILIPS ELECTRON NV**

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Issued/Filed Dates:

**May 9, 1995 / July 28, 1994**

Application Number:

**JP1994000176889**

IPC Class:

**A46B 13/02; A46B 5/00; A61C 17/22;**

Priority Number(s):

**July 30, 1993 NL1993000000795**

Abstract:

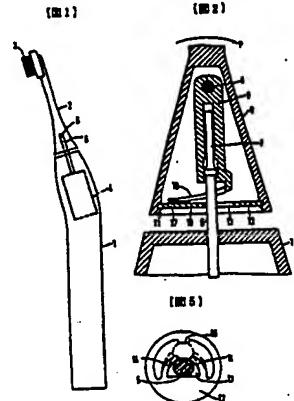
**Purpose:** To warn a user of excessive brushing pressure of a toothbrush by designing a rotary shaft arranged in its second housing part to take snap motion upon receiving pressure over a predetermined threshold pressure from a spring and produce mechanical coupling with a drive shaft.

**Constitution:** A second housing part 2 receives force rotating it clockwise brushing. A drive shaft 5 presses elastic arms 14 outward. The shaft 5 takes snap motion to disengage from the arms 14 and butt against a detent part 15 upon receiving pressure over a predetermined threshold pressure. That snap motion causes a rapid movement of the housing part 2 carrying a brushing head and thereby notifies the user of excessive brushing pressure. That also requests the user to reset the housing part 2 manually.

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Family: [Show known family members](#)

Other Abstract Info: **DERABS G95-062083**



## PATENT ABSTRACTS OF JAPAN

(11) Publication number : 07-116028

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A46B 13/02  
A46B 5/00  
A61C 17/22

(21) Application number : 06-176889

(71) Applicant : PHILIPS ELECTRON NV

(22) Date of filing : 28.07.1994

(72) Inventor : MUELLER INGO  
SCHNEIDER NORBERT  
KRAMMER ERICH

(30) Priority

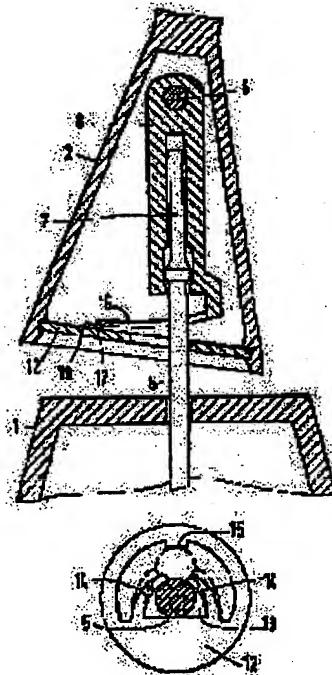
Priority number : 93 9300795 Priority date : 30.07.1993 Priority country : NL

(54) TOOTHBRUSH

(57) Abstract:

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CONSTITUTION: A second housing part 2 receives force rotating it clockwise brushing. A drive shaft 5 presses elastic arms 14 outward. The shaft 5 takes snap motion to disengage from the arms 14 and butt against a detent part 15 upon receiving pressure over a predetermined threshold pressure. That snap motion causes a rapid movement of the housing part 2 carrying a brushing head and thereby notifies the user of excessive brushing pressure. That also requests the user to reset the housing part 2 manually.



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**LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of  
rejection]

[Kind of final disposal of application other than  
the examiner's decision of rejection or  
application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's  
decision of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

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JAPANESE

[JP,07-116028,A]

CLAIMS DETAILED DESCRIPTION TECHNICAL  
FIELD PRIOR ART TECHNICAL PROBLEM  
MEANS EXAMPLE DESCRIPTION OF DRAWINGS  
DRAWINGS

[Translation done.]

\* NOTICES \*

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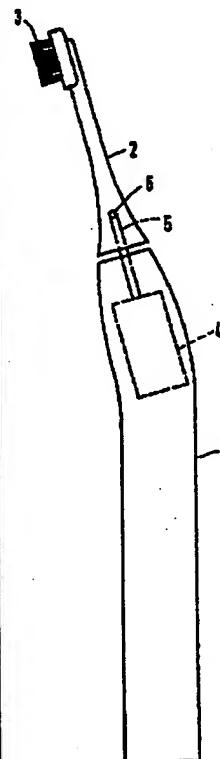
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2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] The pressure which is characterized by providing the following and to which a spring rigging is formed, and the second housing section (2) acts with a spring (14) while using a gear-tooth brush is opposed. It is a rotatable around the aforementioned rotation shaft (6) to the first housing section (1). this spring It is the gear-tooth brush characterized by carrying out snap operation when exceeding the threshold of a certain predetermined pressure, arranging a rotation shaft at the second housing section, and forming a part of mechanical connection [ at least ] between a drive shaft and the second housing section. The first housing section which contains the drive unit (4) for acting as a handle and making a drive shaft (5) drive (1) The brush head (3) which can be driven with a drive shaft is supported. In the gear-tooth brush which it has the two housing sections (1 2) of the second housing section (2) which is a rotatable around a rotation shaft (6), and these housing sections (1 2) receive mutually to a drive shaft (5), and is a rotatable Even if few [ act between the second housing section (2) and a drive shaft (5) and ], it is the spring (14) of a piece.

Drawing selection

[Representative drawing] 

[Translation done.]

\* NOTICES \*

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[Claim 2] The gear-tooth brush according to claim 1 which prepared the connection member (8), and a connection member (8) is a rotatable about the surroundings of a rotation shaft (6), and made the composition which connects the second housing section with a drive shaft (5) possible [ desorption ] by the connection member as a part of aforementioned mechanical connection at the second housing section (2).

[Claim 3] It is the gear-tooth brush according to claim 1 made the composition which has the elastic arm (14) in which this plate has opening (13) which a drive shaft (5) penetrates by having the plate (12) which the aforementioned spring rigging has arranged in the second housing section (2), and this plate carries out elastic engagement with a drive shaft, and the stop section (15) which a drive shaft attaches after snap operation.

[Claim 4] The gear-tooth brush according to claim 2 or 3 which prepared the second spring (16) which has the end by which fixed connection is carried out at a connection member (8), and the other end which carries out snap operation of the salient (18) of the second housing section (2), and is passed when reaching at the threshold of a pressure.

[Claim 5] The gear-tooth brush according to claim 4 made the composition in which the second housing section (2) returns to the original position when decreasing after the pressure exceeded the threshold.

[Claim 6] The gear-tooth brush according to claim 3 which attached the plate (12) in the second housing section (2) possible [ desorption ].

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[Translation done.]